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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,854	08/09/2006	Warren Mirtsching	2472-90-PUS	7138

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EXAMINER

WELLS, NIKITA

ART UNIT	PAPER NUMBER
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2881

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10/02/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/597,854	Applicant(s) MIRTSCHING ET AL.	
	Examiner Nikita Wells	Art Unit 2881	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09 August 2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-10, 12-13, and 15, are rejected under 35 U.S.C. 102(b) as being anticipated by Lagunas-Solar et al. (5,364,645).

With respect to claims 1, 3-5, 7-8, and 10, Lagunas-Solar et al. disclose (Abstract; Col. 1, lines 55-68; Col. 2, lines 37-68; and Col. 9, lines 14-28) a method of reducing microorganisms on the surface of a packaged food object comprising irradiating said microorganisms on the surface of a food object with a plurality of ultraviolet light pulses for less than about one second (claims 7 and 10 – Col 7, lines 36-42 and Claim 4), said light pulses having a duration between about 0.1 ns to about 1,000 ns (Col. 2, lines 52-68), and wherein said light pulses have energy densities between about 0.1 J/cm² and about 10 J/cm² (Col. 2, lines 52-68; Claims 4 and 6), and wherein said microorganisms are reduced by said irradiation without affecting surface characteristics of said food object (Col. 9, lines 14-28).

With respect to claims 6, 13, and 15, Lagunas-Solar et al. disclose (Col. 5, lines 34-43 and Claim 3) a method of reducing microorganisms on the surface of a packaged food wherein said microorganisms are irradiated with fewer than about 100 of said light pulses.

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With respect to claims 9 and 12, Lagunas-Solar et al. disclose (Col 7, lines 36-50) a method of reducing microorganisms, wherein the light pulse has a wavelength between about 200 nm and about 400 nm.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 11 and 14, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lagunas-Solar et al. (5,364,645) in view of Li et al. (2006/0135699 A1).

With respect to claims 2, 11, and 14, Lagunas-Solar et al. disclose a method of reducing microorganisms on the surface of a packaged food object (as shown in item #2 above), but fails to disclose that the food packaging comprises a co-extruded blend of polyolefins. However, Li et al. disclose [0002, 0003, 0269, and 0270] food packaging which comprises a co-extruded blend of polyolefins which is used in the wrapping and containing food preserved by UV irradiation.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to recognize and substitute the plasticizing of polyolefin (for wrapping and containing food) of Li et al. into the method of UV irradiation of packaged food of Lagunas-Solar et al. for establishing an efficient method of irradiating the microorganisms on the surface of a food object with a plurality of ultraviolet light pulses.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Clark et al. (5,786,598) disclose the sterilization of packages (including polyolefins) and their contents using high intensity, short duration UV light pulses. Tanaka et al. (4,983,411) disclose the sterilization of vacuum packaged raw meat.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nikita Wells whose telephone number is (571) 272-2484. The examiner can normally be reached on 8:30 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571) 272-2293. The central fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Nikita Wells/
Primary Examiner, Art Unit 2881
September 29, 2008

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